

*Appl. No. 09/643,004***REMARKS**

Claims 9-41 and 47-69 are pending in the application with claims 9, 31, and 47 amended herein. Applicant expresses appreciation for allowance of claims 52-59 and for the indication that claims 15, 19, 23, 24, 36, 51, and 64 set forth allowable subject matter.

Claims 9-14, 16, 17, 18, 20-22, 25-30, 47-50, 62, 63, 65, and 69 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Fazan (U.S. Patent No. 5,597,756) and Nogami (U.S. Patent No. 6,060,333). Applicant requests reconsideration. Page 2 of the Office Action lists claim 47 as rejected, but the remainder of the Office Action does not provide any grounds for rejection of claim 47. Applicant can only assume that the basis relied upon by the Office for rejecting claim 47 is similar to the basis for rejecting claim 9 on pages 2-3 of the Office Action.

Amended claim 9 sets forth a low selectivity deposition method that includes, among other features, forming a first part of a nucleation layer directly on a first surface of a substrate, forming a second part of a nucleation layer directly on a second surface of the substrate, and forming a deposition layer containing a chemisorbed first specie layer about 1 monolayer thick directly on the first and second parts of the nucleation layer substantially non-selectively. The deposition layer forms less readily on the first surface compared to the second surface. Page 3 of the Office Action states that claim 9 is unpatentable over Fazan and Nogami in part because claim 9 does not require the nucleation layer to be directly on the substrate and the deposition layer to be directly on the nucleation layer. Claim 9 is amended

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herein to clarify that it is so limited. The amendment to claim 9 is supported at least by Figs. 3, 4, and 6 and the text associated therewith in the present specification.

Page 2 of the Office Action alleges that Fazan dielectric layer 16 discloses the claimed first surface and bitline contact plugs 18B disclose the claimed second surface. Also, the Office Action alleges that the Fazan first silicon nitride layer 22 and second silicon dioxide layer 23 disclose the claimed first and second parts of a nucleation layer. However, neither first silicon nitride layer 22 nor second silicon dioxide layer 23 are formed directly on dielectric layer 16 and bitline contact plugs 18B. The Office Action does not allege that Nogami remedies such deficiencies of Fazan. Accordingly, the cited combination fails to disclose or suggest every limitation of claim 9. Claims 10-14, 16-18, 20-22, and 25-30 62, 63, and 65 depend from claim 9 and are patentable at least for such reason as well as for the additional limitations of such claims not disclosed or suggested.

Amended claim 47 sets forth a low selectivity deposition method that includes, among other features, atomic layer depositing a nucleation substance chemisorbed directly on a first surface and a second surface of a substrate substantially non-selectively. The first surface chemisorbs an atomic layer deposition precursor at a slower rate compared to the second surface. The nucleation substance chemisorbs the precursor at an approximately equal rate over the first surface compared to over the second surface. As may be appreciated from the discussion above regarding the deficiencies of Fazan and Nogami as applied to claim 9, the cited

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combination fails to disclose or suggest the claimed nucleation substance chemisorbed directly on the first surface and the second surface. At least for such reason, claim 47 is patentable over the cited combination. Claims 48-50 and 69 depend from claim 47 and are patentable at least for such reason as well as for the additional limitations of such claims not disclosed or suggested.

As asserted above, claims 9-14, 16-18, 20-22, 25-30, 47-50, 62, 63, 65, and 69 are patentable over Fazan and Nogami and Applicant requests allowance of such claims in the next Office Action.

Claims 31-35, 37-41, and 66-68 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Fazan, Nogami, and Srinivasan (U.S. Patent No. 5,929,526). Applicant requests reconsideration.

Amended claim 31 sets forth a low selectivity deposition method that includes, among other features, simultaneously forming a first part of a nucleation layer directly on an insulative oxide material and a second part of the nucleation layer directly on a semiconductive material. The method includes forming an initiation layer about 1 monolayer thick directly on the first and second parts of the nucleation layer substantially non-selectively. Page 6 of the Office Action alleges that claim 31 is not patentable over the cited combination in part because the claimed nucleation layer is not required to be directly on the substrate and the initiation layer is not required to be directly on the nucleation layer. Claim 31 is amended hereir to clarify that it is so limited. As may be appreciated from the above discussion regarding the deficiencies of Fazan and Nogami as applied to claim 9, the cited

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combination fails to disclose or suggest the claimed first and second parts of a nucleation layer directly on respective insulative oxide material and semiconductive material. At least for such reason, claim 31 is patentable. Claims 32-35, 37-41, and 66-68 depend from claim 31 and are patentable at least for such reason as well as for the additional limitations of such claims not disclosed or suggested.

As asserted above, claims 31-35, 37-41, and 66-68 are patentable and applicant requests allowance of such claims in the next Office Action.

Claims 60 and 61 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Fazan and Nogami in further view of Kim (U.S. Patent No. 6,500,763 B2). Applicant requests reconsideration. Claims 50 and 61 depend from claim 9, the subject matter of which is discussed above. As asserted, Fazan and Nogami fail to disclose or suggest every limitation of claim 9. Kim does not remedy and is not alleged to remedy the deficiencies of Fazan and Nogami. Accordingly, claims 60 and 61 are also patentable over the cited combination and Applicant requests their allowance in the next Office Action.

Applicant herein establishes adequate reasons supporting patentability of 9-41 and 47-69 and requests allowance of all pending claims in the next Office Action.

Further, Applicant previously submitted a Supplemental IDS and Form PTO-1449 on July 17, 2003 and has not yet received an initialed copy indicating consideration of the references. Review of the Office's PAIR Image File Wrapper indicates that the Office is in possession of the document.

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Applicant requests consideration of the references and return of an initialed copy to the undersigned.

Respectfully submitted,

Dated: 08 Jun 2006

By: 

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